



Spatial Analysis of the Israel-Palestine Conflict: Urbicide in Gaza

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September 2025

Volume:22 Issue:5

DOI: 10.26466/opusjsr.1727004

Citation:

Uçar, H. & Torun, A.T. (2025). Spatial analysis of the Israel-Palestine conflict: Urbicide in Gaza. OPUS-Journal of Society Research, 22(5), 910-927.

Abstract

The Israeli-Palestinian conflict, which dates back many years, involves more than just territorial acquisition or military confrontation; it also has theological foundations in addition to political, socio-cultural, and psychological dynamics. Following Hamas's preemptive attacks on Israel in October 2023, the destruction caused by Israel's airstrikes and systematically implemented policies particularly targeting Gaza has qualities that go beyond the typical damage a city suffers during wartime. The ceasefire declared on January 19, 2025, was violated by Israel with airstrikes on Gaza on the morning of March 18, which specifically targeted civilians. In the October 7 Hamas attack, approximately 1,200 people lost their lives, and 251 individuals were taken hostage by Hamas. As of today, more than 70,000 Palestinians mostly women and children and 850 Israeli soldiers have lost their lives in the ongoing conflict. In addition to the human toll, the destruction in Gaza is of a scale and severity that cannot be overlooked. Given the extent and nature of this destruction, the core objective of this study is to evaluate whether it can be interpreted through the concept of "urbicide," which is understood in the literature as the spatial/urban manifestation of genocide. While the attacks carried out by Israel in Gaza are generally regarded by the public as acts of genocide, from a legal standpoint it is crucial to substantiate such a characterization by demonstrating the nature of these attacks with the support of scientific evidence. To this end, the historical development of the Israeli-Palestinian conflict was reviewed, and the situation in Gaza was assessed using remote sensing and GIS techniques to determine whether it meets the commonly accepted characteristics of urbicide. Based on analyses conducted with remote sensing data provided by the United Nations Satellite Center (UNOSAT), it was found that between October 15, 2023, and February 25, 2025 a total of 11 analyzed time periods 68,154 general buildings, 207 places of worship, 225 educational institutions, and 58 hospitals were completely destroyed. In light of these findings, the study engages in an in depth discussion of whether the policies implemented by Israel in Gaza constitute an act of "urbicide."

Keywords: Israeli-Palestinian conflict, urbicide, remote sensing, geographical information system, urbanization policies

Öz

Arka planı çok uzun yıllar öncesine dayanan ve salt bir toprak elde etme ya da askeri bir çatışma olmaktan öte anlamlar içeren İsrail-Filistin sorunu, siyasal, sosyo kültürel ve psikolojik dinamiklerin yanı sıra teolojik temellere de sahiptir. Ekim 2023 tarihinde Hamas'ın İsrail'e düzenlediği saldırıların akabinde İsrail'in özellikle Gazze'ye yönelik düzenlediği hava saldırıları ve sistematik olarak uygulanan politikalar neticesinde meydana gelen yıkım, bir kentin savaştan gördüğü zararın ötesinde niteliklere sahiptir. 19 Ocak 2025'te ilan edilen ateşkes İsrail'in 18 Mart sabahı Gazze'ye başlattığı özellikle sivilleri hedef alan hava saldırılarıyla ihlal edilmiştir. 7 Ekim'deki Hamas saldırısında yaklaşık 1.200 kişi hayatını kaybederken 251 kişi Hamas tarafından rehin alınmıştır. Günümüze kadar çoğu kadın ve çocuklardan oluşan 70,000'den fazla Filistinli ve 850 İsrail askeri bu süreçte hayatını kaybetmiştir. Bu can kayıplarının yanı sıra Gazze'de meydana gelen tahribat göz ardı edilemeyecek niteliktedir. Gazze'deki yıkımın boyutları ve niteliği göz önünde bulundurulduğunda, bu yıkımı soykırımın mekandaki/kentsel alandaki yansıması olarak literatürde yer bulan kentkırım" kavramıyla açıklamanın mümkün olup olmadığını değerlendirmek bu çalışmanın temelini oluşturmaktadır. Kamuoyu tarafından İsrail'in Gazze'de gerçekleştirdiği saldırıların genel olarak soykırım olarak kabul edildiği görülmekle birlikte yasal açıdan da bunun sağlanabilmesi için saldırıların niteliğinin bilimsel verilerin desteğiyle ortaya konulması oldukça önemlidir. Bu nedenle İsrail ve Filistin arasındaki çatışmaların tarihsel gelişimi incelenerek Gazze'deki durumun genel kabul gören kentkırım özelliklerini taşıyıp taşımadığı uzaktan algılama ve CBS teknikleri kullanılarak incelenmiştir. Birleşmiş Milletler Uydu Merkezi'nin (UNOSAT) sağladığı uzaktan algılama verileri ile yapılan analizlerin sonucunda, 15 Ekim 2023 ve 25 Şubat 2025 tarihleri arasında incelenen toplam 11 periyotluk veriler sonrasında 68,154 genel yapı, 207 ibadethane, 225 eğitim kurumu, 58 hastanenin tamamen yıkıldığı tespit edilmiştir. Çalışmada elde edilen sonuçlar doğrultusunda İsrail'in Gazze'de uyguladığı politikaların bir "kentkırım" olup olmadığı derinlemesine tartışılmıştır

Anahtar Kelimeler: İsrail-Filistin çatışmaları, kentkırım, uzaktan algılama, coğrafi bilgi sistemleri, kentleşme politikaları





Introduction

Throughout history, cities have been exposed to devastating impacts due to wars. Since ancient times, the desire to eliminate the settlements of targeted populations, as well as the centers of social production and governance, has rendered cities primary targets. As a result, historical literature includes numerous examples of how wars have led to the destruction of cities and the devastation of cultural heritage.

Pappe (2007) notes that studies on Palestine and Israel are primarily centered around the history of conflict. However, according to him, conflict is not the only factor that defines life in Palestine and Israel. There are various dimensions that should be considered in evaluations. Nevertheless, Western countries and the United States tend to ignore the suffering of Palestinians and view their resistance as terrorist activities against Israel, a state recognized as legitimate. Although technological advancements and the spread of information via social media allow for rapid dissemination of events to the public, this has not led to significant changes in state policies. This trend is also reflected in academic circles and the literature. Even in a country like Turkey, where the majority of the population does not support Israeli policies, an article examining the academic literature highlights this perspective. According to a study by Akkaya and Gürsu (2024), which conducted a bibliometric analysis of academic works in Turkey, there are 481 articles, 36 master's theses, and 7 doctoral dissertations with the keywords "Gaza genocide" and "Palestine issue." Among these, only 14 define what happened in Gaza as genocide. Most of these academic works (13 of them) focus on legal and human rights aspects. These data underscore the importance of this study's contribution to the literature. This research scientifically demonstrates that the acts listed in Article 2 of the United Nations' "Convention on the Prevention and Punishment of the Crime of Genocide" acts that have been recognized as crimes since 1946 are in fact occurring in Gaza. The concepts of genocide and urbicide, which will be further discussed in this study, will be examined in depth.

To evaluate the impact of wars on cities, several historical events can be considered milestones. In

this context, the bombings of Dresden and Hamburg after World War II, and the atomic bombings of Hiroshima and Nagasaki, represent a significant divergence from previous cases of urban destruction due to their unique and far reaching impacts. During the Cold War, military efforts focused on strategic targets rather than urban destruction, with an emphasis on minimizing civilian casualties to legitimize actions (Batuman, 2006). However, after the Cold War, power struggles increasingly occurred in urban areas, turning cities into primary targets of violence (Çağlar, 2020). Today, the nature and reach of wars are rapidly evolving and expanding.

The tension, conflict, and war between Israel and Palestine remain one of the most contentious issues in the Middle East, both historically and today. Between the late 19th century and the early 20th century, establishing a state became the main goal for Zionists. Zionism, which emerged as a result, was largely supported by Western countries, which helped facilitate its objectives. In the pre-Holocaust period, this support was primarily driven by messianic ideological currents, colonial ambitions, and broader geopolitical strategies. According to Zionism, in order to establish the desired state, it was necessary to seize Palestinian lands by forcibly displacing or subjugating the local population. After the establishment of the Zionist state, complete control over the region required a demographically homogeneous population. Israeli policies toward the local population during conflicts reflect this view and exhibit characteristics that were genocidal.

On October 7, the Hamas preemptive attack resulted in the deaths of approximately 1,200 people, mostly civilians, and the abduction of 251 individuals by Hamas, mainly soldiers. As a result of prisoner exchanges during the ceasefire period, 59 prisoners remained unrecovered by Israel. Of these, it is estimated that only 21 are still alive, with the others being killed by Israeli strikes. According to recent data from the Gaza Ministry of Health, more than 61,258 Palestinians, mostly women and children, have been killed in Israeli operations. Additionally, the Israeli army has lost 850 soldiers during this period. Alongside the loss of life, the humanitarian crisis in Gaza has deepened due to

Israel's near complete blockade of humanitarian aid, including the restriction of food, fuel, and water supplies. The destruction of urban infrastructure, coupled with the worsening living conditions through aid restrictions, has systematically resulted in the forced displacement of Palestinians from their living spaces. In line with the genocidal nature of Israeli policies, the destruction in urban areas can also be defined as "urbicide." This study will first provide a brief overview of the historical development of Israeli-Palestinian relations since World War I, then define the concept of urbicide, and finally analyze the destruction in Gaza that constitutes urbicide using Remote Sensing and Geographic Information Systems (GIS) techniques. The destruction has been analyzed using very high spatial resolution (30 cm) satellite imagery provided by the United Nations Satellite Centre (UN-OSAT), covering 11 periods between October 15, 2023, and February 25, 2025. The destroyed urban areas have been examined in separate groups and mapped.

This study provides an innovative framework to analyze the spatial consequences of the protracted genocide against the Palestinian population particularly its manifestation in urban destruction by combining remote sensing and GIS techniques. Since 1948, Israel has launched fifteen military operations against the Gaza Strip. Three major wars have also taken place between Israel, Palestine, and Arab countries. While some studies have focused on the urban impacts of these conflicts, this research specifically concentrates on the events beginning on October 7, 2023, and the developments that followed.

Historical Background of Israel–Palestine Relations

Located within the region historically referred to as the "Fertile Crescent," Palestine has been subjected to numerous invasions over thousands of years due to both its rich and strategic natural environment and its significance for the three major monotheistic religions (Karaman, 1996; Taşdemir, 2000). In 1099, Palestine came under Crusader control, but it was recaptured by Muslim rule in 1187 when the Ayyubids conquered Jerusalem. Subsequently, in 1291, it came under the rule of the

Mamluks and remained so for two and a half centuries. Following the Egyptian Campaign of Sultan Selim I. in 1516, the region was incorporated into the Ottoman Empire and remained under Ottoman administration until the end of World War I, 1917.

The Jewish people, meanwhile, had migrated and dispersed widely throughout history, often as a result of persecution and socioeconomic hardship. As a consequence, Jewish identity came to be centered around the notion of a stateless people exiled from their ancestral homeland. Nevertheless, Jews generally maintained the belief that God had promised them the Holy Land and that they would one day return (Skinner, 2003). The migration of Jews from nearly all Christian majority countries to Palestinian territories began in the late 19th century. The period between 1917 and 1948 marks a phase during which efforts were made to Judaize the territory of Palestine (Kişi, 2023). In parallel, 1917 stands out as a significant turning point for the realization of Zionism—a political movement aimed at establishing a Jewish homeland and a sovereign state in Palestine—due to the developments that occurred in that year (Kişi, 2023; Uyanık & Yavuz, 2023). Through formal negotiations, Zionist lobbyists succeeded in convincing British authorities that a Jewish colony in Palestine would better serve Britain's strategic interests (Pappe, 2007).

Britain, the dominant global power of the time, made promises between 1915 and 1918 to various Arab communities in the region, pledging to support their independence. Also, they promised to facilitate the establishment of a homeland for Jews in Palestine. These conflicting commitments laid the foundation for the prolonged conflict in the Middle East and the contemporary Palestinian issue (Taşdemir, 2000). However, contrary to its promises, the British government implemented the 1916 Sykes–Picot Agreement, which divided the promised Arab territories between Britain and France and proposed an international administration for Palestine instead of an independent Arab state (Karaman, 1996). As a result, amid the chaos of World War I (1914–18) and the collapse of the Ottoman Empire, Britain gained control of Palestine, a mandate that was officially sanctioned by the League of Nations in 1922 (Skinner, 2003).

As British authorities encouraged increased Jewish immigration to the region, tensions between the Jewish and Arab populations escalated—particularly following the establishment of the Jewish Agency for Palestine in 1929 by the Zionist organization to coordinate its objectives in the area. The Arab Revolt of 1936–1939 not only convinced the British that Palestine should be partitioned into separate Jewish and Arab states but also prompted them to adopt policies aimed at restricting further Jewish immigration to the region (Skinner, 2003).

World War II (1939–1945) can be regarded as a pivotal turning point for Zionism. A new wave of anti-Semitism in Europe, culminating in the Holocaust, triggered a renewed and significantly larger influx of Jewish immigration to Palestine. As international support for Zionism increased-including from the United States—Zionist leaders continued to promote Jewish settlement despite restrictions imposed by British authorities. As a result, tensions in the Middle East intensified further. Zionist paramilitary groups not only assisted in facilitating illegal immigration, but also engaged in violent confrontations with Arabs and launched insurgent operations against the British. Unable to develop a diplomatic solution to the escalating violence between Jews and Arabs in the region, Great Britain relinquished its mandate in 1947 and transferred responsibility for the Palestine question to the newly established United Nations (UN).

The Partition Plan, presented to the General Assembly by the United Nations Special Committee on Palestine, proposed the termination of the British Mandate and the establishment of separate Arab and Jewish states, while also delineating the borders of Jerusalem as an internationally administered city. Despite opposition from five Arab states, as well as Iran, Pakistan, Afghanistan, and Türkiye, the partition of Palestine was approved by the UN (Sariaslan, 2019).

Zionism, which emerged in the late 19th received substantial backing from Western powers, particularly Britain, whose support was rooted not in a perceived moral obligation toward the Jewish people, but in a long-standing fusion of messianic religious ideology and strategic colonial ambitions.

As El-Awaisi (2019) demonstrates, the notion of establishing a Jewish presence in Palestine predated political Zionism itself, originating in European—especially British—plans to create a "Zionist client-state" or buffer state in the Holy Land to safeguard imperial interests. Such designs were driven by the desire to secure control over strategic trade routes, counter rival powers, and realise certain eschatological visions prevalent in Protestant evangelical thought, thereby embedding the Zionist project within the broader framework of Western colonial policy.

The State of Israel was officially established on May 14, 1948, by David Ben-Gurion, based on the United Nations Partition Plan. Immediately thereafter, Egypt, Jordan, Syria, Lebanon, and Iraq entered the territories declared as part of Israel, initiating the 1948 Arab - Israeli War widely considered the first in a series of Arab - Israeli wars that would continue for decades. As a result of the war, Israel occupied 78% of Mandate Palestine, expanding its territory from the 5,800 square miles allocated under the 1947 UN partition resolution to approximately 8,000 square miles (Sariaslan, 2019).

The West Bank was divided between Israel and Jordan, while Gaza—central to the focus of this study—was partitioned between Israel and Egypt. Following these territorial gains through military action and forced displacement, hundreds of thousands of Palestinians were expelled from their homes, and Israel's political presence in the region was formally established. The United States, the United Kingdom, and several other Western countries officially recognized Israel.

Türkiye initially adopted a "wait and see" approach, but following Israel's admission to the United Nations, it formally recognized the state in 1949. Notably, Türkiye became the first Muslim majority country to recognize Israel diplomatically (Sariaslan, 2019). Diplomatic relations between the two countries have fluctuated over time—ranging from periods of military and trade cooperation to moments when diplomatic representation was suspended or downgraded. As one of the key regional actors, the European Union—having established formal diplomatic relations with Israel in 1959—has maintained its engagement with both Israel

and Palestine in ways aligned with its own strategic interests (Keskin, 2010).

Following the official establishment of the State of Israel, the forced displacement, expulsion, and death of hundreds of thousands of Palestinians accelerated as a result of escalating conflicts. Although Israel claims that Palestinians emigrated voluntarily and that their displacement was not the result of a deliberate policy but rather a consequence of war, it is well documented that during the event known as the "Nakba Catastrophe" or "Great Catastrophe" of 1948, approximately one million Palestinians were subjected to ethnic cleansing and forced into exile. A total of 675 towns and villages across Palestinian territory were destroyed, thousands of Palestinians lost their lives, and thousands more were forcibly displaced. In many of these depopulated areas, place names were changed in a systematic effort to erase Palestinian cultural identity and memory. These actions reflect an intentional strategy to erase the historical and cultural heritage of the Palestinian people (Arı, 2024).

The Second Arab–Israeli War in 1956, also known as the Suez Crisis, erupted following Egypt's nationalization of the Suez Canal. In alliance with the United Kingdom and France, Israel invaded the Gaza Strip and the Sinai Peninsula. However, due to pressure and intervention from the United States and the Soviet Union, Israel was ultimately forced to withdraw.

In 1959, Fatah was founded in Kuwait by Yasser Arafat, followed by the establishment of the Palestine Liberation Organization (PLO) in 1964.

Following the Six Day War in 1967 between Israel and the Arab states of Egypt, Jordan, and Syria, Israel seized control of the West Bank, East Jerusalem, and the Gaza Strip. Life in the occupied territories became increasingly difficult for Palestinians, and alongside the struggle to establish their own state and reclaim lost lands, Palestinian nationalism began to intensify.

In 1973, the Arab–Israeli War broke out following coordinated attacks against Israel from multiple fronts, including breaches through barbed wire fences between Gaza and Israel. These attacks were led by Arab states under the leadership of Egypt and Syria. The aftermath of the war influenced po-

litical and social dynamics in Gaza, where the Mujama al-Islamiya an Islamic charitable organization with ties to the Egypt-based Muslim Brotherhood was established the same year. This organization later served as the foundation for the creation of Hamas, officially known as the Islamic Resistance Movement, in 1987 by Palestinian imam and activist Ahmed Yasin. Hamas's stated goal is to establish an Islamic Palestinian state in the West Bank and Gaza Strip, territories occupied by Israel since 1967. As a Palestinian paramilitary group and Sunni Islamist political party, Hamas went on to win the majority of seats in the Palestinian Legislative Council through elections. Following the rise of the Islamic Resistance Movement, the State of Palestine was declared de facto on November 15, 1988. To date, 145 of the 194 United Nations member states have recognized Palestine, with several also establishing diplomatic relations.

The Camp David Peace Accords, signed between Israel and Egypt in 1978, enabled Egypt to regain control of the Sinai Peninsula, which it had lost during the Six-Day War. However, what made the agreement particularly significant was that Egypt became the first Arab country to officially recognize the State of Israel under international law.

In 1982, Israel launched the what it termed "Operation Peace for Galilee" with the aim of eliminating Palestinian guerrilla bases in southern Lebanon, eventually advancing as far as the Lebanese capital, Beirut. Following the operation, Lebanese Christian Phalangist militias supported by the Israel Forces carried out a massacre in the Sabra and Shatila refugee camps in Beirut. The atrocity became the subject of an official inquiry by the Kahan Commission in Israel, which ultimately led to the dismissal of the Israeli Minister of Defense.

In 1987, the First Palestinian Intifada (uprising) began, against Israeli occupation in the West Bank and Gaza Strip, lasting until 1993 and resulting in the killing of over one thousand Palestinians. During this period, images of Palestinian civilians confronting the heavily armed and well equipped Israeli military (equipped with tanks, rifles, and full body protective gear) using slingshots, stones, and Molotov cocktails became widespread in the public sphere and gradually normalized. To suppress this example of civil disobedience, Israel employed

excessive force, mass arrests, deportations, and the construction of new settlements. Thousands of Palestinian civilians, including children, were injured or killed during this period, and many others were subjected to physical and psychological torture. The Intifada movements across Palestinian territories became powerful symbols of resistance against the Israeli occupation. Beyond their symbolic importance, these uprisings also represented the Palestinians' assertion of their right to self-determination and national identity (Arı, 2024).

The period between 1993 and 2000 can be considered a partial peace process during which armed conflict between Israel and Palestine gave way to economic transformations (Özkoç, 2009). Through a series of signed agreements, Israel agreed to withdraw from parts of the occupied territories and accepted, in principle, the establishment of an independent Palestinian state. However, despite the absence of direct military conflict, this period also marked a phase in which Israel strengthened its economic structure and implemented various sanctions that effectively rendered the Palestinian economy dependent on Israel. As such, the conflict continued—albeit in a different form-through economic control and structural constraints.

Following Israel's withdrawal from the occupied territories, both Palestinian land and governance became divided, resulting in a dual political structure. Hamas established political dominance and authority in the Gaza Strip, while Fatah maintained control in the West Bank. Citing security concerns, Israel launched a series of military operations against Hamas designated by Israel as a terrorist organization and the Gaza Strip: Operation Cast Lead (Gaza massacre) in 2008, Operation Pillar of Defense in 2012 (Battle of shale stones), Operation Protective Edge in 2014, and Operation Guardian of the Walls in 2021 (Çalık Topuz & Arafat, 2023). The most recent of these operations targeting Gaza—which has become the focal point of the Israeli-Palestinian conflict—serves as the primary point of reference for this study.

Urbicide

The concept of urbicide can be interpreted as the spatial manifestation of genocide. Genocide has been explicitly recognized as a crime by the United Nations since 1948. Not only the commission of genocidal acts but also conspiring to commit them, inciting them directly and publicly, participating in them, or even attempting them, are all considered punishable offenses.

According to Article 2 of the Convention on the Prevention and Punishment of the Crime of Genocide (1948) genocide is defined as:

"any of the following acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group, as such:"

- a) Killing members of the group;
- b) Causing serious bodily or mental harm to members of the group;
- c) Deliberately inflicting on the group conditions of life calculated to bring about its physical destruction in whole or in part;
- d) Imposing measures intended to prevent births within the group;
- e) Forcibly transferring children of the group to another group. (United Nations, 1948)

In a manner similar to the foundational logic behind the concept of genocide, the term urbicide derived from the Latin urbanus (meaning "of the city") and the Greek-rooted suffix -cide (meaning "to kill")—emerged as a term that denotes the destruction not only of the physical elements of urban space, but also of the lifestyle inherently tied to those material conditions. The word urban refers not only to the tangible characteristics of a city but also to the social and cultural patterns produced by those characteristics. When combined with the suffix -cide, which signifies killing or extermination, urbicide captures the deliberate annihilation of both the city and urban life. The term was initially used as urbicid in Serbo-Croatian, later translated into English as urbicide, and subsequently into Turkish as kentkırım, following similar derivational patterns based on the model of the word genocide (Uçar Altınışık, 2022).

The global population residing in urban areas is steadily increasing, rendering cities indispensable living spaces for humankind. In parallel, urban spaces, under the influence of various risks and conflicts, are at times transformed into literal targets or battlefields. Urbicide represents the most severe and destructive manifestation of these dynamics. In such instances, the urban environment ceases to be merely the stage on which violence occurs and becomes the very object upon which violence is enacted.

It can be argued that the concept of urbicide is still undergoing conceptual maturation. Some scholars classify a wide range of destruction occurring within urban areas—such as wars, urban redevelopment projects, construction and infrastructure works, earthquakes, gang violence, terrorism, and environmental hazards—as forms of urbicide (Karasu & Aksungur, 2025). The emergence of the term can be traced particularly to the 1990s, when it was employed by researchers to describe the impacts of the war in Bosnia and Herzegovina. Examples frequently cited in scholarly work include the Baghdad bombing broadcast live by the global media during the Gulf War (1991), ongoing air raids targeting Kyiv in the Russia-Ukraine War, the Los Angeles riots (1992), terrorist attacks in Mogadishu (1993), the United States' assault on Fallujah (2004), the Reina nightclub attack in Istanbul (2017), the George Floyd protests in Minnesota (2020), urban renewal projects in Barcelona's Ciutat Vella Square and Singapore's Rochor Centre, and, notably, Israel's assaults on Gaza.

Urbicide refers to the destruction of a population, its culture(s) particularly cultural heterogeneity—and its urban environment (Coward, 2004). It involves the widespread eradication of both the built environment and social diversity, which are foundational components of urban life (Coward, 2006). In essence, urbicide constitutes a deliberate and systematic act of violence targeting both the tangible and intangible elements of the city. When buildings in shared spaces—used by pluralistic communities in their everyday lives—are demolished, and urban infrastructure is eliminated, the possibility for diverse groups to coexist is effectively destroyed (Coward, 2004).

When claims are made that the destruction occurring in a city constitutes urbicide, it is often observed that those responsible for or supportive of the destruction defend themselves using similar justifications and references. Typically, during military operations, the stated objective is the elimination of strategic, logistical, or military targets. In such cases, civilians—both people and property may be unintentionally harmed or destroyed, resulting in what is termed collateral damage. Even if the urban environment or historical and cultural structures are not directly targeted during warfare, incidental destruction may still occur (Coward, 2004; Karasu, 2008). However, to classify an act as urbicide, there must be a deliberate targeting of structures and monuments that carry symbolic significance for a particular group. In other words, the destruction of a city's historical and cultural assets may occur either as a direct objective of urbicide or as unintended collateral damage during warfare the outcomes may be similar, but the intentions behind them are fundamentally different (Karasu, 2008). Urbicide involves more than simply inflicting material or emotional harm on a specific group. It entails the intentional destruction of urban spaces that serve as vehicles for cultural transmission. Beyond the immediate damage, the objective includes severing intergenerational connections between past, present, and future (Sipahi & Çakar, 2023). In general, for the destruction of urban areas to be defined as urbicide, several conditions must be met: the existence of prior discursive efforts to "other" the targeted group; the occurrence of destruction within built environments where civilians reside—that is, in urban spaces; the presence of widespread and large scale spatial violence; and the execution of deliberate and planned actions aimed at restructuring the space through controlled and homogenized urban forms (Abujidi, 2019; Yılmaz & Şahin, 2018).

This study aims to evaluate the extent of the destruction carried out by Israel in Gaza and assess whether it meets the criteria outlined above, under various analytical categories.

Study Area and Methods

Study Area

The study area encompasses the Gaza Strip, a narrow coastal territory situated along the eastern Mediterranean, covering an area of approximately 365 km² and geographically positioned around

31.220° N latitude and 34.250° E longitude. Extending roughly 41 km in length and varying in width between 6 and 12 km, the Gaza Strip is home to over 2.3 million people, making it one of the most densely populated regions globally (Andreou et al., 2024). This confined area exhibits an intricate socio-political landscape, shaped by decades of conflict, strict border controls, and ongoing urban degradation. These factors have profoundly influenced local living conditions and disrupted the ecological balance. Due to its geopolitical sensitivity and environmental vulnerability, the Gaza Strip constitutes a compelling case study from both scientific and humanitarian perspectives. The geographic extent of the study area is illustrated in Figure 1.



Figure 1. Study area map (Gaza Strip)

Methods

Remote sensing is based on the principle of acquiring information about objects without any physical contact, by recording and utilizing the data through a sensing device (Lillesand et al., 2004). Satellite systems used in remote sensing enable the differentiation of various surface features on Earth. Geographic Information Systems (GIS), on the other hand, encompass the entire process of storing, analyzing, querying, and presenting spatial data obtained through specific methodologies (Bilgilioglu et al., 2022). Through the integration of remote sensing and GIS, it is possible to conduct detailed analyses and generate comprehensive spatial representations of data. In this study, building damage data derived through remote sensing

techniques by UNOSAT using high-resolution satellite imagery from WorldView-2, WorldView-3, and Pléiades Neo satellites were queried and analyzed within a GIS environment. These satellites offer very high spatial resolution imagery, enabling UNOSAT to accurately identify and map buildings that were either damaged or destroyed. The data, which are freely and publicly available on the official UNOSAT website (https://gaza-unosat.hub.arcgis.com/pages/data?preview=true), served as the primary data source for this research and were subjected to further analysis. The technical specifications of the WorldView-2 and 3 and Pléiades satellites are presented in Table 1. Table 2 presents information regarding the observation periods of the study area and which satellites were used during those times. All maps presented in this study were produced using data provided by UNOSAT and generated with ArcGIS Pro software.

Table 1. Specifications of satellite images used in UNOSAT Data (European Space Agency, 2025; Maxar, 2020)

Feature	Specification		
	Worldview-2	Worldview-3	Pléiades
			Neo
Launch	2009	2014	2021 (Neo 3
Date			& Neo 4)
Orbit Type	Sun-synchro-	Sun-synchro-	Sun-syn-
	nous, ~770 km al-	nous, ~617 km	chronous,
	titude	altitude	~620 km al-
			titude
Panchro-	0.46 m	0.31 m	0.30 m
matic Res-			
olution			
Multispec-	1.84 m	1.24 m	1.20 m
tral Reso-			
lution			
SWIR	8 bands (Coastal,	8 bands (3.7 m	Red Edge,
Bands/Ex-	Blue, Green, Yel-	resolution)	Deep Blue
tra Bands	low, Red, Red		
	Edge, NIR1,		
-	NIR2)		
Total	9 (1 Pan + 8 MS)	29 (Pan, MS,	6 (Pan + MS)
Number of		SWIR, CAVIS)	
Bands			
Swath	~16.4 km	~13 km	~14 km
Width			
Daily Cov-	~1,000,000 km ²	~680,000 km²	~1,000,000
erage Ca-			km² (con-
pacity			stellation)
Temporal	Revisit in less	Revisit in less	Revisit up
Resolution	than 1 day	than 1 day	to 2 times
			per day

Table 2. Data dates and satellite observations.

Date	Satellite
15.10.2023	WorldView-2
07.11.2023	WorldView-3
26.11.2023	WorldView-3
06.01.2024	Pleiades NEO
29.02.2024	WorldView-3
01.04.2024	WorldView-3
03.05.2024	WorldView-3
06.07.2024	WorldView-3
06.09.2024	WorldView-3
01.12.2024	WorldView-2
25.02.2025	WorldView-3

Findings

Urbicide in Gaza After October 7, 2023

Even prior to 7 October 2023, certain practices implemented by Israel can be regarded as forms of urbicide. Among these are the numerous checkpoints that must be crossed when traveling from one settlement to another or when moving from the Palestinian territories to Israeli cities, as well as the so-called "Security Barrier" in the West Bank construction of which began in 2002. This structure extends for 720 kilometers, reaches eight meters in height, and comprises electric fencing, watchtowers, and surrounding military roads. Such checkpoints exert an intolerable impact on the daily lives of Palestinians. Nearly half a million Palestinians employed in Israel are compelled to wait for hours at checkpoints each day in order to reach their workplaces, attend school, or visit hospitalssometimes even within their own neighborhoods.

The "anti-terror wall," as designated by Israel, cuts directly through the campus of Al-Quds University, separates 11 Palestinian villages and the 95,000 residents therein from their homes, lands, and gardens, and functions not only as an impediment to urban life but also as a tool of segregation and marginalization. Practices justified by Israel on security grounds—such as arrests and detentions,

land confiscations, home raids, curfews, and acts of violence particularly targeting youth—have become a normalized aspect of daily life for Palestinians (Karasu & Aksungur, 2025).

Since October 7, 2023, Israel has been committing an unprecedented act of state terrorism against the Palestinian people—an ongoing crime against humanity carried out in full view of the international community (Arı, 2024). A 300-page report by Amnesty International, a London-based human rights organization, investigates the nine month period following October 7. The report concludes that the Israeli military has violated the United Nations-backed Convention on the Prevention and Punishment of the Crime of Genocide (1948) by committing acts that fall within the definition of genocide: "acts committed with intent to destroy, in whole or in part, a national, ethnical, racial or religious group." The report draws primarily on field documentation from Gaza and on inflammatory and dehumanizing statements made by Israeli officials. According to the findings, there is no evidence that Israel's airstrikes from October 2023 to April 2024 were aimed at legitimate military targets. Israel has targeted hospitals, mosques, churches, community facilities, infrastructure for electricity, water, and telecommunications, and even ambulance convoys-openly declaring its disregard for the laws of war and prompting scenes of mass atrocity (Arı, 2024). Since that time, the sites chosen by Israel for attack have continued to lack military value, and the number of civilian casualties has risen exponentially. While Israel continues its operations without pause, images circulating on social media have exposed the nature of the attacks and the tragic toll on civilians through graphic visual documentation. In addition to ongoing assaults on civilians, Israel has committed further violations by cutting off access to electricity and water and by blocking humanitarian aid deliveries intended for Palestinians-further constituting crimes against humanity. Palestinians have been ordered to evacuate the region, yet the evacuation process has been disorganized, unrealistic, and has forced large populations into uncertainty. Even those fleeing in convoys or seeking refuge in camps have been bombed—clearly indicating that the ultimate goal is to remove or eliminate Palestinians from the region entirely. Both Israeli and American officials have publicly stated that they are in negotiations with two regional powers to facilitate the complete evacuation of Palestinians. Previously, settler policies aimed to seize Palestinian properties incrementally; now, however, the rhetoric suggests a full scale destruction of the region in order to reconstruct it entirely for Israeli habitation.

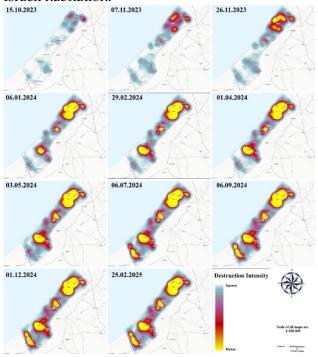


Figure 2. Spatial heat map of attack impacted areas in Gaza after October 7, 2023

Since October 7, 2023, sustained bombardments and assaults by Israeli military forces have dealt a severe blow to urban life in Gaza. The targeted destruction of residential areas and critical infrastructure demonstrates a clear and systematic application of urbicide in the region. Data from this study, derived from UNOSAT satellite imagery, reveal a discernible northward progression of destruction in Gaza, beginning in the south and moving steadily toward the north. Figure 2 presents a heat map showing building destruction based on data collected between October 15, 2023, and February 25, 2025. The map illustrates the intensity of building damage at the onset of the Israeli attacks, as well as the evolving concentration of destruction over successive data acquisition dates. According to building inventory data provided by UNOSAT, 173,350 structures have been identified in the Gaza Strip using remote sensing techniques. Figure 3 visualizes the changes in these structures from October 15 onward, highlighting newly detected damaged buildings and those with increased damage levels as of November 7.

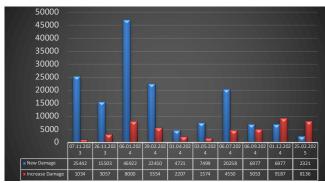


Figure 3. Newly occurred and increased damages after October 15, 2023.

Damaged and Destroyed Structures in the Urban Area of Gaza

This section presents the spatial distribution and interpretation of buildings in Gaza that have been damaged or destroyed. The data collected by UN-OSAT have been categorized into several groups, including general buildings/residences, hospitals, educational institutions (school/university), places of worship, industrial facilities, tourism facilities and commercial centers.

General Buildings-Residences

In urban environments, housing plays a critical role in the establishment and continuity of daily life. Residential structures, which are essential for human survival and protection from environmental factors, have been among the most heavily damaged elements during the attacks on the Gaza Strip. Remote sensing analyses conducted in Gaza have identified approximately 170,000 structures classified under the "general buildings-residences" category. Post October 7, 2023, assessments reveal that around 70,000 of these buildings have been completely destroyed. To visualize the status and spatial distribution of structures in the general buildings category, a map was produced (Figure 4). This map clearly illustrates the density and distribution of general buildings across the Gaza Strip. At the beginning of the attacks, 1,906 buildings were identified as destroyed, 2,062 as severely damaged, 6,213 as moderately damaged, and 3,941 as possibly damaged. According to the most recent dataset, these figures have escalated dramatically to 68,143 destroyed, 18,282 severely damaged, 51,011 moderately damaged, and 29,273 possibly damaged structures. As these structures constitute the majority of Gaza's urban fabric, they continue to suffer damage beyond the period covered by this study. The destruction or impairment of these buildings poses serious consequences for the urban population, including a sharp decline in living standards, widespread displacement, and the growing risk of homelessness.

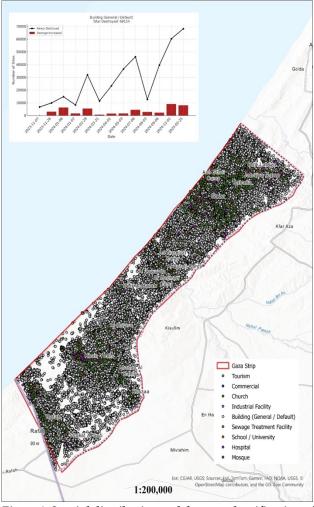


Figure 4. Spatial distribution and damage classification of structures in the "General Buildings-Residences" category across the Gaza Strip.

Hospitals and Medical Facilities

Hospitals play a vital role in protecting public health, treating illnesses, and combating epidemics. However, due to the ongoing conflict in Gaza, many hospitals have either been severely damaged or completely destroyed. This has resulted in the collapse of healthcare services, the near total cessation of treatment processes, and thousands of reported civilian fatalities. Medical personnel are being forced to provide treatment in unsanitary and unsafe conditions, risking their own lives in the process.

Satellite data obtained after October 7 indicate that a large number of hospitals in Gaza have been completely destroyed or rendered severely inoperative (see Figure 5). Initial data show that, during the first wave of attacks, 3 hospitals were completely destroyed, 4 were severely damaged, and 5 were moderately damaged. As the attacks continued, these numbers rose significantly. According to the most recent dataset, 58 hospitals or medical facilities have been completely destroyed, 42 are severely damaged, and 110 are moderately damaged.

A closer analysis of the most recent high resolution satellite imagery reveals that several of Gaza's largest and most critical healthcare institutions have been struck. Al-Shefa'a Hospital, the largest medical complex in the territory, has sustained multiple direct hits with several buildings completely destroyed. Beit Hanoun Hospital has also suffered catastrophic losses, and other key facilities such as Al Qudse Hospital, Al Naseer Pediatric Hospital, Al-Ranteesi Al-Naser Paediatric Hospital, and the Jordanian Hospital have been either destroyed or heavily damaged. The destruction of these major hospitals has critically reduced the already limited healthcare capacity, leaving thousands without access to essential medical services.

Overall, the data indicate a deliberate and systematic pattern of strikes on major healthcare centers, reflecting a scale of destruction that will have long-term consequences for public health in Gaza.

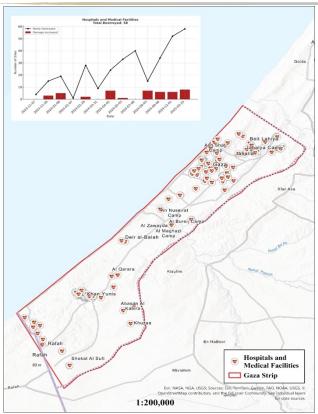


Figure 5. Distribution map and damage status of hospitals and medical facilities in the Gaza Strip.

Educational Institutions (Schools and Universities)

The development and long-term sustainability of societies depend fundamentally on education. Educational institutions are among the most critical infrastructures shaping the future of any nation; their destruction can significantly hinder societal progress, cause communities to lag behind others, and jeopardize their prospects for development.

In the context of the ongoing Israel–Palestine conflict, educational facilities—traditionally regarded as safe spaces for learning and, in times of crisis, potential shelters for civilians—have increasingly become targets of airstrikes and artillery fire. This has rendered many schools and universities across the Gaza Strip either severely damaged or completely unusable.

Based on UNOSAT satellite damage assessments, the situation has worsened dramatically over time. As illustrated in Figure 6, the initial dataset recorded a total of 1,022 educational facilities, including both schools and universities, of which 3 were completely destroyed, 6 severely damaged,

18 moderately damaged, and 8 possibly damaged. The most recent assessment, however, indicates a drastic escalation: 225 facilities have been completely destroyed, 211 severely damaged, and 498 moderately damaged.

Within this broader category, UNOSAT data identify 19 universities across the Gaza Strip, collectively comprising 124 buildings that have been directly affected by Israeli attacks. Of these, 33 buildings were already classified as completely destroyed at the time of the most recent assessment. The temporal patterns in the university dataset demonstrate a clear progression of damage, with numerous facilities transitioning from lower damage categories to total collapse during the observation period.

The same figure also presents the school dataset, which reveals a consistent increase in both the severity of damage and the number of destroyed facilities over time. These patterns collectively point to a systematic dismantling of Gaza's educational infrastructure.

These findings suggest that beyond immediate harm, the targeting of educational institutions is part of a broader strategy to erode the foundations of Palestinian society and undermine its capacity to recover.

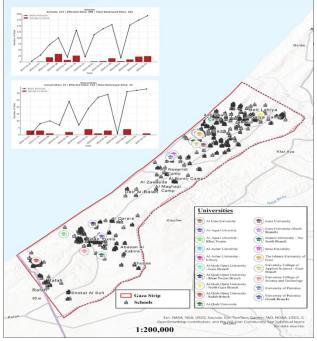


Figure 6. Spatial distribution and damage status of educational institutions (schools and universities) in the Gaza Strip.

Places of Worship

Places of worship are sacred spaces where individuals are free to practice their religious duties and which serve as symbols of social cohesion and peace. The targeting of such sites during wars or conflicts results not only in physical destruction but also in profound spiritual and cultural trauma. International legal authorities explicitly emphasize the obligation to protect places of worship during armed conflict (International Committee of the Red Cross, 1977). However, an analysis of recent attacks in Gaza reveals a blatant disregard for international law, with many religious structures having been destroyed or damaged.

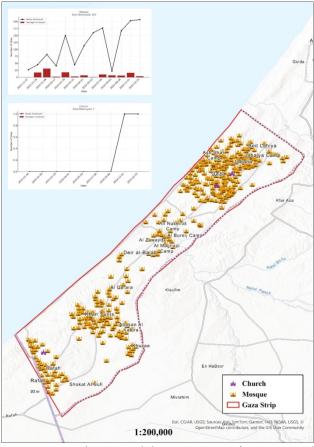


Figure 7. Distribution and damage status of mosques and churches in the Gaza Strip.

Remote sensing data from the Gaza Strip show that, during the initial wave of attacks, 3 mosques were completely destroyed, 4 were severely damaged, 21 were moderately damaged, and 7 were possibly damaged. By the date of the most recent dataset, the number of destroyed mosques had risen to 207, while 130 were severely damaged and

71 were moderately damaged. Among the destroyed mosques was the Great Omari Mosque, a historic and culturally significant landmark in Gaza's Old City that was largely destroyed in an Israeli air strike on 8 December 2023. In addition to mosques, Gaza is home to three churches, one of which was confirmed to have been destroyed in the dataset dated September 6, 2024. These findings suggest that Israel's attacks have not only targeted Muslim places of worship but also those of the Christian community residing in the region. Figure 7 maps the locations of mosques and churches in the Gaza Strip and illustrates their damage status through supporting graphical data.

Industrial Facilities

Industrial facilities are among the foundational components of a country's economic infrastructure. The functioning and sustainability of critical services such as production, energy, and food supply depend on the uninterrupted operation of these facilities. The destruction of key installations-such as power plants, water treatment plants, or manufacturing factories—can severely disrupt essential services. When such facilities are targeted or destroyed during conflict, they not only reduce the population's immediate standard of living but also undermine the region's ability to recover economically in the post-conflict period. The targeting of Gaza's industrial areas by Israel during the conflict has also impeded the local population's ability to plan for the future.

Figure 8 presents the spatial distribution and damage statistics of industrial facilities in the Gaza Strip. In the initial post–October 7 dataset, 4 facilities were found to be completely destroyed, 13 severely damaged, 22 moderately damaged, and 6 possibly damaged. According to the latest dataset from February 2025, 199 industrial facilities were confirmed as completely destroyed, 77 as severely damaged, and 121 as moderately damaged.

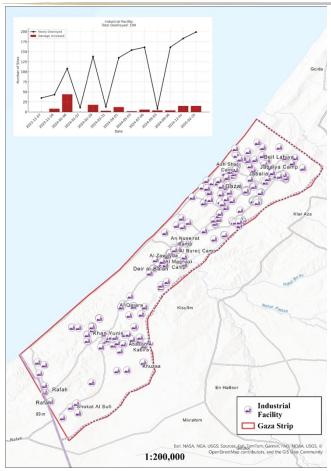


Figure 8. Distribution and damage status of industrial facilities in the Gaza Strip.

Cultural Heritage Sites

Cultural heritage sites, often regarded as key symbols of a nation's identity, play a vital role in preserving history, fostering cultural exchange, and contributing to economic vitality. In regions like Gaza which possesses a considerable coastline of approximately 40 kilometers and a rich historical heritage these sites represent an important source of community pride as well as a potential driver of employment and income for the local population. One notable example is the Al-Saqqa House, a 17th-century Mamluk-style residence located in Gaza City's Shuja'iyya district. Serving for centuries as both an architectural landmark and a hub for social and economic gatherings, it was completely destroyed in an Israeli airstrike on 10 November 2023, marking a profound loss to Gaza's cultural and historical fabric.

Figure 9 illustrates the locations and damage status of cultural heritage sites within the Gaza

Strip. According to the initial dataset, 2 facilities were completely destroyed, 2 were severely damaged, 4 were moderately damaged, and 6 were possibly damaged. In the dataset from February 2025, the numbers had risen significantly: 53 facilities were identified as completely destroyed, 22 as severely damaged, and 21 as moderately damaged.

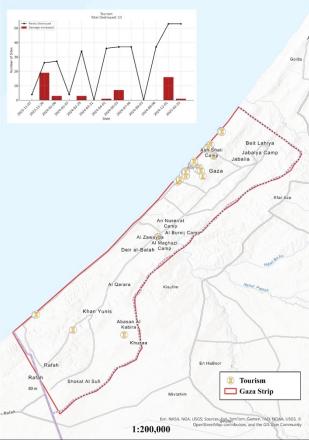


Figure 9. Distribution and damage status of tourism facilities in the Gaza Strip.

Commercial Centers

Commercial centers are among the most tangible indicators of a city's or region's economic vitality, serving as key sites for the regulation of trade on both national and international levels. In Gaza, these centers are primarily composed of small and medium sized enterprises that constitute the backbone of the local population's livelihood. Decades of conflict have severely disrupted commercial activity in the region, just as they have affected other critical sectors.

Figure 10 presents the spatial distribution and damage assessment of commercial centers in the

Gaza Strip based on satellite imagery. Of the 75 commercial centers identified, initial data indicate that 1 was completely destroyed, 3 were severely damaged, and 3 were moderately damaged.

In the most recent dataset, the number of completely destroyed commercial centers increased to 27, while 12 were classified as severely damaged and 33 as moderately damaged.

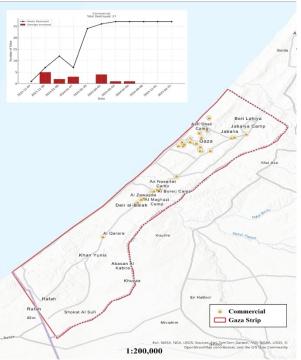


Figure 10. Distribution and damage status of commercial centers in the Gaza Strip.

Reflections of the Gaza Crisis in Public Discourse and the Diplomatic Positions of States

Since the Nakba catastrophe, Zionists and their supporters have continuously argued that the displacement of Palestinians was not part of a systematic plan, whereas Palestinians and their advocates claim—supported by various pieces of evidence—that the process constituted an ethnic cleansing campaign. Two prominent historians, Benny Morris and Ilan Pappé, have emerged as leading voices in the academic and public discourse on this issue. Each has substantiated their respective perspectives through numerous scholarly publications and books.

In the contemporary era, control over communication processes plays a pivotal role in enhancing

a country's influence and power globally. Consequently, those who dominate communication technologies-whether societies or groups-may, at times, intentionally mislead the public or manipulate information to serve their own interests. This disinformation process extends beyond traditional media to include the production of content across various social media platforms (Geneș & Taydaș, 2024). A recent study that examined content verification data from a fact checking platform analyzing suspicious social media content about the Israel-Palestine conflict (between October 7 and December 31, 2023) revealed that out of the most widely shared posts, 109 were false, 2 were accurate, and 1 was a mixture of both. Among the types of misinformation detected were: 79 false associations, 4 distortions, 4 fabrications, 3 manipulations, 1 impersonation, 1 parody, 7 false association/fabrication, 4 false association/out of context, 3 false association/manipulation, 2 fabrication/manipulation, and 1 false association/distortion (Aydın, 2024). In this context, it is nearly inevitable that media-and especially social media-will produce misleading results regarding ongoing conflicts. For this reason, studies based on scientific methods are crucial in providing accurate and objective insights. Particularly through social media, a considerable volume of misleading information is deliberately disseminated at high speed in an effort to shape public perception. These narratives often inaccurate and, in many cases, deliberately distorted serve to obscure, and in effect conceal, the realities of the genocide and urbicide taking place in Palestine. In countering such perception management campaigns, it is essential to conduct research grounded in empirical evidence and to present information obtained from reliable sources in accordance with objective criteria. Such an approach is crucial not only for informing the public accurately, but also for ensuring the integrity of historical assessments.

The stances adopted by countries in the face of conflicts—whose roots often extend back centuries—are shaped not only by historical ties but also by contemporary geopolitical dynamics. As in the past, the United States and its leaders have declared unconditional support for Israel. President Trump even shared on social media his vision of

the region post-conflict, explicitly expressing a scenario where Palestinians were entirely removed from the area.

In contrast, the European Union's policies toward the Israel–Palestine conflict differ from those of the United States, which provides unwavering political and military support to Israel. While EU policies contain features that appear more favorable to Palestinians, it is evident that the EU's foreign policy instruments remain insufficient in addressing the ongoing crisis (Keskin, 2010).

Discussion and Conclusion

This study focuses on a region whose historical background dates back centuries and which has never lost its status as the epicenter of conflict. Specifically, it aims to reveal the consequences of the urban destruction caused by Israel in the Gaza Strip following October 7, 2023. The hypothesis guiding this research was that the destruction in Gaza does not constitute incidental or collateral damage resulting from armed conflict, but rather a deliberate and systematic act of urbicide. The findings strongly support this hypothesis.

Beyond political discourses, the maps, the number and characteristics of the destroyed or damaged buildings clearly demonstrate that civilians were intentionally targeted, and that the complete annihilation of the city was one of the central goals. Beginning with the northern part of Gaza, Israel called for civilian evacuation, yet even those who heeded the warnings and moved along the suggested routes were still targeted. Moreover, the destruction of urban infrastructure essential to civilian survival—such as hospitals, educational institutions, commercial zones, and water or electricity supply systems—further reinforces the planned nature of the attacks.

In this study, building data derived from UN-OSAT satellite imagery was analyzed and spatially mapped. A total of 11 datasets from different dates were examined using remote sensing and GIS techniques. The analysis reveals that the attacks began in the north and progressed systematically southward across the Gaza Strip (see Figure 2). This calculated progression forcibly displaced people from

their homes and continued to deny them the right to live even in the places to which they fled.

According to the data, out of 173,350 structures detected via satellite imagery, 68,918 were completely destroyed, 18,782 were severely damaged, 51,875 suffered moderate damage, and 29,273 were classified as possibly damaged since October 7, 2023. The widespread destruction of general buildings, which form the core of Gaza's urban residential fabric, stands as a striking indicator of the urbicide conducted by Israel.

The devastation in Gaza extends beyond residential areas. Hospitals, which are vital to public health, educational institutions, which form the foundation of society, and industrial facilities, which sustain the region's economic activity, have all been targeted and severely damaged. The destruction of these structures not only causes direct harm to infrastructure but also prevents the survival of the civilian population by cutting off access to clean water, electricity, and international humanitarian aid. Despite these dire circumstances, civilians who manage to survive are systematically forced to abandon their homeland.

This ongoing genocide, occurring in the 21st century and in full view of the international community, is accompanied by urbicide, which can be described as the spatial manifestation of genocide. The numerical data and geospatial analyses provided through satellite mapping substantiate this reality. Although global public opinion appears to express strong solidarity with the people of Gaza, this popular empathy is not reflected in official state policies.

The findings of this study have significant theoretical, practical, and political implications. Theoretically, they contribute to the literature on urbicide by offering a spatially grounded case study that links deliberate urban destruction to broader concepts of genocide and spatial justice. Practically, the evidence underscores the urgent need for international monitoring mechanisms capable of documenting and prosecuting urban destruction as a distinct category of crime. Politically, the results highlight the necessity for the international community to recognize the destruction in Gaza not only as a humanitarian crisis but also as a spa-

tial crime that systematically targets the urban fabric and civilian life. Such recognition would require the development of new legal frameworks and policy instruments aimed at preventing and punishing urbicide in armed conflicts.

Based on these findings, several recommendations emerge. Policymakers and international organizations should adopt legal definitions of urbicide and incorporate them into humanitarian and criminal law to ensure accountability. Reconstruction plans for Gaza must prioritize the restoration of essential urban infrastructure such as hospitals, schools, and utilities to safeguard the survival and dignity of the civilian population. Humanitarian aid strategies should also address the spatial dimensions of displacement and urban fragmentation caused by systematic destruction. For future research, it is essential to examine the long-term social, cultural, and psychological consequences of urbicide in Gaza through ethnographic and participatory approaches, with particular attention to how the deliberate dismantling of the city's spatial fabric undermines community resilience and identity. Comparative analyses with other documented cases of urban destruction could not only refine theoretical understandings of urbicide but also strengthen the legal and political frameworks necessary to hold perpetrators accountable under international law, thereby safeguarding the urban heritage and the right to the city for the Palestinian people.

Declarations

Funding: No funding was received for conducting this study.

Conflicts of Interest: *The authors declare no conflict of interest.*

Ethical Approval: This article does not involve any studies with human participants or animals conducted by the authors. Therefore, ethical approval was not required.

Informed Consent: *Not applicable*.

Data Availability: All data used in this study were obtained from the publicly available datasets of the

United Nations Satellite Centre (UNOSAT) (https://gaza-unosat.hub.arcgis.com/pages/data?pre-view=true).

Authors' Contributions: : Both authors contributed equally to the conception, design, analysis, and writing of the manuscript.

Acknowledgments: The authors gratefully acknowledge the United Nations Satellite Centre (UN-OSAT) for providing the satellite data used in this study.

AI Disclosure: No artificial intelligence-based tools or applications were used in the preparation of this study. All content of the study was produced by the authors in accordance with scientific research methods and academic ethical principles.

References

Abujidi, N. (2019). *Urbicide in Palestine: Spaces of oppression and resilience*. Routledge. https://www.routledge.com/Urbicide-in-Palestine-Spaces-of-Oppression-and-Resilience/Abujidi/p/book/9780367867218

Akkaya, M., & Gürsu, O. (2024). Gazze Soykırımı bağlamında Türkiye'de yapılan çalışmaların bibliyometrik analizi. *Burdur İlahiyat Dergisi, Gazze*, Article Gazze. https://doi.org/10.-59932/burdurilahiyat.1576500

Andreou, G. M., Fradley ,M., Blue ,L., & and Breen, C. (2024). Establishing a baseline for the study of maritime cultural heritage in the Gaza Strip. *Palestine Exploration Quarterly*, 156(1), 4–42. https://doi.org/10.1080-/00310328.2022.2037923

Arı, Y. (2024). Gölgede kalan yıkım: İsrail'in devlet destekli terörü ve soykırım trajedisi tarihi. *Eskişehir Osmangazi Üniversitesi İlahiyat Fakültesi Dergisi,* 11(2), Article 2. https://doi.org/10.-51702/esoguifd.1491769

Aydın, A. F. (2024). Sosyal medyada propaganda ve algı yönetimi: İsrail-Filistin savaşı örneği. *Ombudsman Akademik*, Özel Sayı 2 (Gazze), 65–99.

Batuman, B. (2006). Kentkırım: Savaş, kent ve mimarlık. *Mimarlar Odası Ankara Şubesi Bülteni*, 43, 22–31.

Bilgilioglu, S. S., Gezgin, C., Orhan, O., & Karakus, P. (2022). A GIS-based multi-criteria decision-making method for the selection of potential municipal solid waste disposal sites in Mersin, Tur-

- key. *Environmental Science and Pollution Research*, 29(4), 5313–5329. https://doi.org/10.1007/s11356-021-15859-2
- Çağlar, M. T. (2020, December 10). *Kentkırım ve Sadr şeh-rinin mekansal dönüşümü*. Ulusaldan Küresele: Popülizm, Demokrasi, Güvenlik Konferansı, Işık University Press.
- Çalık Topuz, Z., & Arafat, M. (2023). Birleşmiş milletler güvenlik konseyi kararlarının Filistin-İsrail barış sürecine etkisi. *Ankara Üniversitesi SBF Dergisi*, 78(2), Article 2. https://doi.org/-10.33630/ausbf.1065955
- Coward, M. (2004). Urbicide in Bosnia. In *Cities, War, and Terrorism* (pp. 154–171). John Wiley & Sons, Ltd. https://doi.org/10.1002/97804-70753033.ch9
- Coward, M. (2006). Bosna'da kentkırım: Etno-milliyetçilik ve Bosna'daki yok etme saldırganlığı. *Mimarlar Odası Ankara Şubesi Bülteni*, 43, 32–38.
- El-Awaisi, K. (2019). The origins of the idea of Establishing A "Zionist Client-State" In Islamicjerusalem. *Journal of Al-Tamaddun*, 14(1), 13–26. https://doi.org/10.22452/JATvol14-no1.2
- European Space Agency. (2025). *Pléiades Neo Instruments.* https://earth.esa.int/eogateway/missions/pleiades-neo#instruments-section
- Geneş, M., & Taydaş, O. (2024). Dezenformasyon ile Algı yaratmak ve bilgi kontrolü: İsrail – Filistin Savaşı Örneği. *İletişim ve Diplomasi*, 12, 5–24. https://doi.org/10.54722/iletisimvediplomasi.1487823
- International Committee of the Red Cross. (1977). Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I), Article 53. International Committee of the Red Cross. https://ihl-databases.icrc.org/en/ihl-treaties/api-1977/article-53
- Karaman, M. L. (1996). Filistin. In *TDV İslam Ansiklopedisi* (Vol. 13, pp. 89–103). https://cdn2.islamansiklopedisi.org.tr/dosya/13/C13004685.pdf
- Karasu, M. A. (2008). Bir kentin ölümü: Kentkırım (Bosna—Hersek Örneği). Çagdaş Yerel Yönetimler Dergisi.
- Keskin, M. H. (2010). İsrail-Filistin sorununa yönelik AB politikaları. *Akademik Orta Doğu*, *5*(1).
- Kişi, E. (2023). 1948'DEN Bugüne, Tarihi ve Siyasi Yönleri ile '''İsrail- Filistin Sorunu'''. *Anlambilim MTÜ Sosyal ve Beşeri Bilimler Dergisi*, 3(1), Article 1.
- Lillesand, T. M., Kiefer, R. W., & Chipman, J. W. (2004). Remote sensing and image interpretation (5th ed). Wiley.
- Maxar. (2020, June). *WorldView-2 Datasheet*. https://resources.maxar.com/data-sheets/worldview-2

- Özkoç, Ö. (2009). Savaş ve barış: Doksanlı yıllarda Filistin-İsrail sorunu. *Ankara Üniversitesi SBF Dergisi*, 64(03), Article 03. https://doi.org/10.1501/SBFder_0000002117
- Pappe, I. (2007). *Modern filistin tarihi: Tek ülke, iki halk*. Phoenix. https://books.google.com.tr/books?id=ZUp70AEACAAJ
- Sarıaslan, F. (2019). İsrail-Filistin sorunu ve Türkiye: Bir denge siyaseti. *Filistin Araştırmaları Dergisi, 6,* Article 6. https://doi.org/10.34230-/fiad.618731
- Sipahi, E. B., & Çakar, R. (2023). Soykırımın mekândaki iz düşümü olarak kentkırım anlatıları: Bosna Hersek Örneği üzerinden belgesel film analizi. İnsan ve Toplum, 13(1), Article 1.
- Skinner, P. (2003). The Jews in Medieval Britain: Historical, Literary, and Archaeological Perspectives. Boydell Press.
- Taşdemir, F. (2000). İsrail-Filistin sorununun selfdeterminasyon hakkı çerçevesinde analizi. *Gazi Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, 2(2), Article 2.
- Uçar Altınışık, H. (2022). Kentkırım. In *Kamu Yönetimi Ansiklopedisi—Yerel Yönetimler, Kent ve Çevre Politikaları* (1st ed., p. 382). Nobel Akademik Yayıncılık.
- United Nations. (1948). Convention on the prevention and punishment of the crime of genocide. https://www.un.org/en/genocideprevention/documents/atrocity-crimes/Doc.1_Convention%20on%20the%20Prevention%20and%20Punishment%20of%20the%20Crime%20of%20Genocide.pdf
- Uyanık, N., & Yavuz, H. (2023). Balfour Deklarasyonu'nun ilanı, tepki ve destekler. *Kastamonu İnsan ve Toplum Dergisi*, 1(2), Article 2.
- Yılmaz, F. H., & Şahin, A. (2018). Kentsel Yıkımın Bosna ve Filistin örnekleri üzerinden kentkırım kapsamında değerlendirilmesi. *Selçuk Üniversitesi Sosyal Bilimler Meslek Yüksekokulu Dergisi*, 21(1), Article 1. https://doi.org/-10.29249/selcuksbmyd.401085